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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,471	10/30/2001	Chhandomay Mandal	P6066	1329
21127	7590	08/17/2004	EXAMINER	
KUDIRKA & JOBSE, LLP ONE STATE STREET SUITE 800 BOSTON, MA 02109			HOANG, PHUONG N	
			ART UNIT	PAPER NUMBER
			2126	

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/021,471	Applicant(s) MANDAL ET AL.	
	Examiner Phuong N. Hoang	Art Unit 2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 26 are pending for examination.

Specification

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (p. 8 lines 3 and 21). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 5 and 13 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

5. As to claim 5, "The method of claim 1 wherein step (a) comprises inserting a storage volume interface layer between the driver software and the storage device, inserting an additional data service interface layer between the storage volume interface

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layer and the storage device and using the storage volume interface layer to divert information passing between the driver software and the storage device to the additional data service layer”.

Examiner see that the storage volume interface is disclosed on page 7 lines 4. But examiner does not see where and how the whole claim is enabled in the disclosure. For examining purpose, examiner treats the claim as inserting a volume of beans can be changed.

6. As to claim 13, it is rejected for the same reason above.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 3, 5 – 9, 11, 13 – 17, and 19 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas “Enterprise JavaBeans Technology Server Component Model for the Java Platform” pages 1 – 24 in view of Clark, US patent no. 6,442,541.**

9. **As to claim 1**, Thomas teaches a method for managing a data service from a management terminal in a distributed computer system having a host computer system with a lookup service and at least one storage device connected to the host computer system by driver software, the method comprising the steps of:

(b) running, in the host, a federated bean that exports an interface (Enterprise Java defines a set of Java APIs that provide access to existing infrastructure services, pages 3 – 4 on Enterprise Java Platform section and page 14) containing methods that generate commands to the management facade (Enterprise JavaBeans Container, page 14);

(c) using the lookup service (name and directory services, pages 3 – 4 on Enterprise Java Platform section and page 15 section Naming and directory services) to obtain a proxy (EJB object, page 3 section Enterprise Java Platform and page 14 on Illustration 2 and page 15 section EJB object) to the federated bean; and

(d) in response to commands received from the management terminal (client, page 14 on Illustration 2), using the proxy to make method calls (method calls, page 14 on Illustration 2) on the federated bean interface.

Thomas does not explicitly teach that the data passing between the driver software and the storage device, and to retrieve data service attributes in order to manage the data service.

Clark teaches the step of the data passing between the driver software and the storage device and to retrieve data service attributes (connecting Java beans to the

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database storage through the JDBC driver and retrieve data, abstract and col. 1 and col. 5 lines 50 – col. 6 line 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Thomas and Clark's system because Clark's connecting to database storage through a driver would provide the services requested from the client terminal with the Enterprise JavaBeans technology.

10. **As to claim 3**, Thomas teaches the step of wherein step (d) comprises using a graphical user interface (GUI, page 8 section Granularity) in the management terminal to generate the commands.

11. **As to claim 5**, Thomas modified by Clark teaches the step of wherein step (a) comprises inserting a storage volume interface layer (volume of interfaces for beans can be implemented, page. 3 section Enterprise Java Platform) between the driver software and the storage device.

It would have been obvious to one of ordinary skill in the art at the time the invention to modify the Thomas's and Clark's system to comprise many interfaces for beans to support the volume of requests from the client.

12. **As to claim 6**, Thomas teaches a large-scale, distributed computer system comprising many servers (page 1) which can be implemented as many host as needed for the step of wherein the distributed computer system comprises a plurality of host

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computer systems each having at least one storage device connected to the each host computer system by driver software and step (a) comprises running in each of the plurality of hosts, management facade software that controls data passing between the driver software and the storage device in the each host and that retrieves attributes of the data service; and step (b) comprises running, in each host, a federated bean that exports an interface containing methods that generate commands to the management facade in the each host.

13. **As to claims 7 and 8**, Thomas teaches the step of wherein step (c) comprises using the lookup service to obtain a first proxy (first EJB object for first bean, page 14) to a first federated bean in one host computer system and using the first proxy to control the first federated bean retrieve a second proxy of a second federated bean running in a second host (it is the relationship between data).

14. **As to claim 9**, it is the apparatus claim of claim 1. See rejection for claim 1 above.

15. **As to claim 11**, see rejection for claim 3 above.

16. **As to claims 13 - 16**, see rejection for claims 5 - 8 above.

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17. **As to claim 17**, it is the product claim of claim 1. See rejection for claim 1 above.
18. **As to claim 19**, see rejection for claim 3 above.
19. **As to claims 20 - 22**, see rejection for claims 6 - 8 above.
20. **As to claim 23**, it is the apparatus claim of claim 1. See rejection for claim 1 above.
21. **As to claims 24 - 26**, see rejection for claims 6 - 8 above.
22. **Claims 2, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas "Enterprise JavaBeans Technology Server Component Model for the Java Platform" pages 1 – 24 in view of Clark, US patent no. 6,442,541, and further in view of Glass, US patent no. 6,629,128.**
23. **As to claim 2**, Thomas and Clark do not explicitly teach the step of wherein step (d) comprises using a command line interface in the management terminal to generate the commands.

Glass teaches that the client try to access to Beans using a command line interface in the management terminal to generate the commands (command line, col. 19 lines 10 – 15 and fig. 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Thomas, Clark, and Glass's system because Glass's command line would enable the client terminal to access to the Beans objects.

24. **As to claims 10 and 18**, see rejection for claim 2 above.

25. **Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas "Enterprise JavaBeans Technology Server Component Model for the Java Platform" pages 1 – 24 in view of Clark, US patent no. 6,442,541, and further in view of McBrearty, US patent no. 5,794,013.**

26. **As to claim 4**, Thomas and Clark do not explicitly teach the step of wherein step (a) comprises inserting a SCSI terminal emulation interface layer between the driver software and the storage device, which interface layer makes the storage device appear as a SCSI device.

McBrearty teaches the step of a SCSI terminal emulation (device emulator, figures 1 and 2) interface layer between the driver software and the storage device

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(remote storage, fig. 2), which interface layer makes the storage device appear as a SCSI device (it is the capability of the emulator).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Thomas, Clark, and McBrearty's system because McBrearty's SCSI terminal emulator would emulate a storage device to look like the SCSI device to adapt with a different environment.

27. **As to claim 12**, see rejection for claim 4 above.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ainsworth et al, US patent no. 6,728,788, demonstrating a method for remote procedure call.

Apte et al, US patent no. 6,269,373, demonstrating a method for persisting beans as container-managed fields.

Rich et al, US patent no. 6,457,065, demonstrating a method for transaction-scope replication for distributed object systems such as Enterprise JavaBeans.

Mandal et al, US patent no. 6,772,178, demonstrating a method for managing for remote data replication in a distribution computer system.


Monson-Haefel, "Enterprise JavaBeans" O'reilly, pages 38 – 39, demonstrating the Enterprise Beans between client and EJB Server.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (703) 605-4239. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ph
August 6, 2004


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